JPRS L/8921

13 February 1980

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

(FOUO 4/80)

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

For further information on report content call (703) 351-2811.

APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000200050023-9

JPRS L/8921

13 February 1980

WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

(FOUO 4/80)

CONTENTS PAGE

CONTENTS (Continued)

WORLDWIDE AFFAIRS

MATRA REVEALS WORLDWIDE TELECOMMUNICATIONS AMBITIONS

Paris AIR & COSMOS in French 1 Dec 79 pp 41-42

[Article by Pierre Langereux]

[Text] Martra's goal in the telecommunications satellite field is to obtain at least four and if possible seven export markets, that is around 25 percent of the world market between now and 1990, disclosed Noel Mignot, director of the Matra Space group, in a press conference on 27 November at Velizy. This would represent about 20 satellites (with three satellites per system) which would join the 11 satellites of the "ECS (Command and Service Squadron) - MARECS - Telecom 1" series presently under construction. These projects will finally compete with those of the best American builders!

If this hope comes to fruition, Matra will owe it certainly to the successes achieved with its partners in the European industrial consortium MESH (the ECS and MARECS satellites), but additionally and above all to its own success in the competition for the national telecommunications satellite Telecom 1.

Last 19 September Matra was chosen as chief builder of Telecom 1 French telecommunications and telecomputer satellites (AIR & COSMOS No 779), after a lively industrial competition (against Aerospatiale).

Matra's proposal for building three Telecom 1 satellites and for setting up the propulsion system (manufactured by Thomson-CSF [General Radio Company] for the duration of a separate contract) rose to fr 250,000,000 with, according to circumstances, an additional fr 25,000,000 in subsidies or less fr 35,000,000 in penalties. This figure was fr 60,000,000 less than its competition's.

At the moment Matra has received from the Telecom 1 project committee, consisting of the CNES (National Center for Space Studies) and the Telecommunications General Administration (DGT) a preliminary contract for fr 7,000,000 for the B stage, which will be completed 15 February 1980 with the delivery of final manufacturing proposals from Matra, the project's head builder, and from Thomson-CSF, builder of the satellites' propulsion system. The final building contract for the Telecom 1 satellites must be accepted on 1 March

1980. It is expected that the project's team will be installed in the new Matra center in Toulouse in July 1980 and that the production of the first satellite will start during the first half of 1982. The launchings of the first two Telecom 1 satellites are expected in December 1982 and in April 1983, with Ariane rockets. The placing into operation of the Telecom 1 system (with one satellite working and one orbitting in reverse) is expected by the DGT for 1 July 1983.

European Sub-Contractors

The industrial organization planned by Matra already includes several European sub-contractors: ERNO (Germany) for the position control propellers; British Aerospace (Great Britain) for power to run machinery, furnishing of components and wiring; Aeritalia (Italy) for structure; SAAB (Sweden) for the telemeasure-telecommand equipment; INTA (National Institute for Aerospace Research) (Spain) for the telemeasure-telecommand aerials; and Fokker-VFW (Netherlands) for the nutation shock absorbers.

Moreover, two industrial competitions are still running to construct the thermic control system of the satellites (between ERNO and Aerospatial) and for the solar panels (between Fokker-VFW and Aerospatiale).

The final choice of sub-contractors for Telecom 1, which will be discussed with the CNES and the DGT, will depend not only on technical considerations but also on political ones.

Nevertheless one can already observe that all the European sub-contractors presently chosen by Matra are members of the MESH consortium, whose current president is moreover Noel Mignot. This is obviously not a matter of chance. Matra's proposal for Telecom 1 in fact willingly uses equipment a platform directly originating from the ECS and MARECS satellites built under the direction of British Aerospace. On the foundation of this series of 11 satellites (5 ECS + 3 MARECS + 3 Telecom 1) Matra thus was able to lower its prices to obtain the French satellite market and to offer satellites at competitive prices (with US prices) in export markets. Therefore, the price of the Telecom 1 satellites is around 30 percent less than the price of the last ECS satellites (3 to 5) whose cost is itself 30 percent less than the price of the first ECS's (1 and 2).

On this point Matra learned a lesson from the call for offers for the Brazilian telecommunications satellite, stated Noel Mignot. Let us recall in fact that for the Brazilsat project Matra at that time had made an offer above $100,000,000 (for satellites of 550 kg it is true), while the American company Hughes Aircraft, given the contract, offered three satellites (of 350 kg) for only $35,000,000! It was an unbeatable price, even for the other American builders (more than $50,000,000 for RCA and $70,000,000 for Ford). Today Matra would be in a position to make a competitive offer, practically half the preceding one.

Export Markets

The Telecom 1 project therefore is the indispensable foundation for attacking export markets, with the recommendation of working equipment used by the French P and T (Postal and Telecommunications Administration).

Several countries - Australia, Argentina, Mexico, Colombia, the Arab nations - are already interested in the telecommunications satellites of the ECS, Telecom 1 family, states Matra.

For the countries of the Arab league, the European Arabsat project introduced under the "leadership" of British Aerospace, with Matra, is competing with that of Hughes Aircraft. The MESH project is a satellite originating from Telecom 1 and Brazilsat, whose propulsion system was created by Thomson-CSF with the participation of Marconi (Great Britain) for certain equipment. Responses to the call for offers prepared by Comsat, consultant of the Arab countries, must be delivered on 7 January 1980. The choice of head builder is expected before next summer.

Colombia, which also chose Comsat as consultant, must theoretically launch its call for offers in the middle or at the end of 1980.

In Argentina, the government commission that has just made the rounds of American and European manufacturers, must theoretically announce a recommendation regarding its needs about March 1980.

In Australia, the study group that in the same way made the rounds of manufacturers recommended creating a national system of telecommunications satellites (AIR & COSMOS No 788). An international call for offers is expected in a year or a year and a half.

In Mexico the project for a national telecommunications satellite was recently mentioned again on the occasion of the Franco-Mexican Exposition, which has just ended. A call for offers is also expected.

Matra seeks especially to enter the telecommunications satellite market in South and Central America by using particularly the subsidiary Interelec (Matra group) in Mexico and its branches in Caracas and through Venezuela, Noel Mignot explained.

But it is not acting alone. Matra planned with British Aerospace and Thomson-CSF to share, according to conditions, the areas of commercial possibilities and marketing activities to conquer export markets . Thus British Aerospace, which has made a special effort in the Arab countries for 5 years, is the project head named by Arabsat. An agreement was also concluded with Thomson-CSF naming the French electronics firm as the head in providing a complete system of telecommunications (satellites, stations, radio beams, computer terminals) for which Matra will build the spatial portion, while the firm in Velizy will be the head in installing a network of telecommunications satellites for which Thomson-CSF will then provide the land portion.

Matra is also expected to offer to the clients "ready to use" financial packages in which they will have as sole financial mediator only the main bank of the head builder. This system is currently in the process of being prepared, and a final meeting on this subject was moreover expected on 30 November among the manufacturers, the CNES and the French and British ministries involved. In the same way, in the area of insurance of commercial risks, only the national organization of the head builder's country (Coface in France) will have authority.

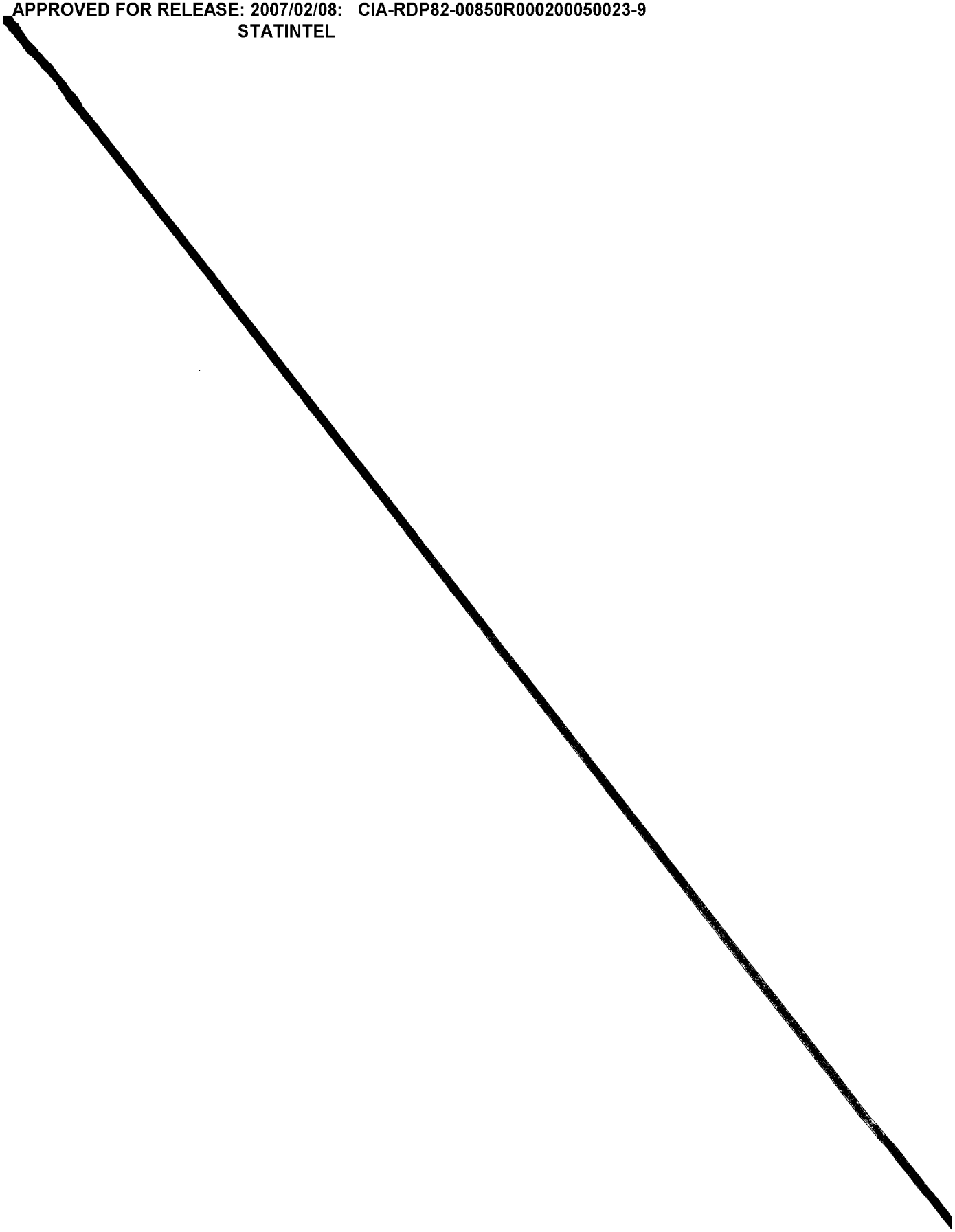
9945
CSO: 5500

JAPAN

BRIEFS

SUPER-LSI COMPUTERS--Fujitsu, LTD--the largest Japanese computer maker--disclosed on 8 January that it has begun delivering a limited number of new model computers--M-150F and M-160F--which are equipped with a super-LSI (large-scale integrated) circuit having a 64-kilobit memory capacity, 4 times as large as that of semiconductors available thus far. Thus, Fujitsu will be the second to equip its computers with a 64-kilobit super-LSI circuit, following IBM of the United States. The firm is now working to mass-produce the 64-kilobit super-LSI circuit, realizing its important role in the 1980's in introducing technical innovations and its expected wider use not only for computers but also for various communications instruments, electric appliances, and automobile components. [Tokyo YOMIURI SHIMBUN in Japanese 9 Jan 80 morning edition p 8 OW]

CSO: 5500



BRIEFS

FRENCH TELECOMMUNICATIONS AID--On 16 October, the Central Fund for Economic Cooperation granted a loan of 12 million French francs to Burundi. This loan will be applied to the financing of a telecommunications program including the installation of a ground station giving access to the international satellite system. The Central Fund loan will be supplemented by a grant from the French Aid and Cooperation Fund (FAC). [Text] [Paris MARCHES TROPICAUX ET MEDITERRANEENS in French 26 Oct 79 p 2905]

CSO: 5500

BRIEFS

INTERNATIONAL TELECOMMUNICATIONS COMPANY--Led by France Cables et Radio company director Selosse, a technical mission left Moroni on 28 November following 4 days of business meetings. Selosse said that the purpose of the meetings was the establishment of a Comoran International Telecommunications Company [Societe de Telecommunications Internationales des Comores, Sticom], scheduled to begin officially on 1 January 1980. "The company will provide international telecommunications links (telephone, telegraph) with the rest of the world," Selosse said. [Excerpt] [Paris MARCHES TROPICAUX ET MEDITERRANEENS in French 7 Dec 79 p 3410]

CSO: 5500

BRIEFS

RADIO WAVE LINK OPENED--Colonel Sassou Nguesso, chief of state, presided over on 30 December a ceremony to open a radio wave link constructed with French aid in the northern part of the Congo. The Congolese minister of information, posts and telecommunications, Capt Florent Tsiba, stressed on this occasion the importance which telephone and television assumed in the north. These means of communication, he stated, permit the information and propaganda of the Congolese Labor Party [PCT] to be disseminated in the most remote recesses of the country. Captain Tsiba added that as the northern axis had been put into service, the southern axis remained to be constructed so as to double the coaxial cable connecting Brazzaville with Pointe-Noire. He also pointed out that Pointe-Noire will be equipped with a small television unit whose opening should take place very soon. The minister called to mind that the Congo had adopted a color television system, as a result of new equipment already acquired or in process of acquisition as part of French aid. [Text] [Paris MARCHES TROPICAUX ET MEDITERRANEENS in French 11 Jan 80 p 90]

CSO: 5500

BRIEFS

CCCE TELECOMMUNICATIONS LOAN--The Central Fund for Economic Cooperation granted a 48 million franc loan to the Republic of Guinea on 20 December 1979. This loan will assist in the financing of a telecommunications development program, the cost of which has been estimated at 74 million francs. This program includes the field of technical operations, as well as the training of operating and maintenance personnel. [Text] [Paris MARCHES TROPICAUX ET MEDITERRANEENS in French 18 Jan 80 p 136]

CSO: 5500

FRANCE

SYMPHONIE SATELLITES SEEN USABLE SEVERAL MORE YEARS

Paris AIR & COSMOS in French 5 Jan 80 pp 34-35

[Text] It has been 5 years since the first Franco-German "Symphonie" telecommunications satellite was successfully launched from Cape Kennedy by an American "Thor Delta 2914" rocket (19 December 1974). The second symphonie was launched under the same conditions 27 August 1975. CNES [National Center for Space Studies] announces that the two satellites have always functioned quite satisfactorily and therefore, save mishap, it is possible to expect to use the satellites for several more years.

The Symphonie program was conducted by CIFAS [Franco-German Consortium for Symphonie Satellite] headed by Pierre Madon of Aerospatiale. CIFAS comprises six principal contractors; three French (Aerospatiale, SAT, and Thomson-CSF), and three German (MBB, Siemens, and AEG-Telefunken).

More Than 110 Uses in 36 Countries

A large international experimental program, in which 20 countries with more than 50 ground stations participate, has developed since the launching. This international cooperation extends from some countries of the Americas (Canada, United States, Argentina) to India and China, passing through many European and African nations such as USSR, the Scandinavian countries, Belgium, Spain, and Tunisia. It also applies to international organizations such as UN, UNESCO, and Red Cross.

On the national level, Symphonie has been used for several years by PTT's administration to insure the links with the island of Reunion, and to transmit television programs to Saint Pierre-et-Miquelon.

This program of scientific and technical experiments began as early as January 1970 when Symphonie started transmitting a Franco-German program conducted by the two principal stations of Pleumeur-Bodou and Raisting. It has been continued regularly eversince on a larger scale, in cooperation with many countries, such as Belgium and the Netherlands to experiment with transmission techniques in 1977; Canada, China, and

India in 1978 and 1979 to experiment with techniques for synchronizing international atomic clocks; the United States to experiment in 1977 and 1979 with high output intercontinental links between computers. This program also allowed some third world countries to become familiar with space techniques; in particular, India since June 1977 and China since May 1978.

A program to assist great causes began September 1975, when one Symphonie station was turned over to Telecom 75 at the UN in the interests of maintaining peace in the Near East. The program has been expanded since, both with the UN and with the German Red Cross.

Using Symphonie for education began in Ivory Coast as early as May 1976 and has since continued, in particular with Quebec.

Some operational uses have also been exercised, such as radio transmissions to Rwanda since 1976, telephone transmissions between the mother country and the island of Reunion since October 1976, and television transmissions to Saint Pierre-et-Miquelon since December 1977.

Some demonstrations of these occasional uses for special events, in particular during the travels of the president of the republic, are at last broadcast regularly, beginning with the first talk between Mr Giscard d'Estaing and Mr Schmidt in January 1975.

The latest uses of the "Symphonie" satellites, in December 1979, have been the following.

-- daily television newscasts from the mother country to the island of Reunion and Saint Pierre-et-Miquelon

-- telephone links between Saudi Arabia and Paris (two circuits)

-- permanent transmissions of broadcasted programs of the voice of Germany to Kigali, Rwanda, to be retransmitted on short wave

-- UN telephone links in the interest of maintaining the peace between Jerusalem, Geneva, and Lebanon

-- synchronization of atomic clocks between France and Canada

-- establishment of video-conferences between Kourou and Paris in preparation for the launching of the "Ariane" rocket

-- audiographic university teleconference between Bouake (Ivory Coast) and Paris

-- experimental techniques transmissions from Raisting to Le Caire and from Pleumeur-Bodou to Berlin

-- perfecting telephone transmissions (24 circuits) between Buenos Aires and Resistencia and television transmissions from France to the following stations

-- experimentation with a very small station which can be boarded on a ship

-- various experimental stations of German DFVLR [expansion unknown]

These links use a great variety of ground stations, both because of their characteristics and their origins

-- B Intelsat standard stations at Pleumeur-Bodou, Raistin, Saint-Denis in Reunion, and Cayenne

-- stations with 9 m antennas at Toulouse, Saint-Pierre-et-Miquelon, Le Caire, Ottawa, Weilheim, Abidjan, and Bouake

-- stations with 4.5 m antennas at Kigali, Geneva, Jerusalem, Lebanon, Riad, Jeddah, Buenos Aires, Resistencia

-- station with a 2.2 m antenna at Rennes

Thus in 5 years, the Symphonie satellites have been used for 110 operations, which have required the operation of around 130 ground stations in more than 36 countries.

Franco-German space cooperation, which began more than 12 years ago with Symphonie, continues with the joint development of a direct television satellite pre-operational program. The satellites will be launched by Ariane rockets beginning in 1983. One of these satellites (TDF 1) will be used by French Telediffusion, and the other (TV-SAT) will be used by German television; the third will be a back up satellite.

9374
CSO: 5500

END